AMENDMENTS TO THE CLAIMS

(including complete listing of the claims)

1-10. (Canceled)

11. (Currently Amended) A method of treating a cancer, characterized by neoplastic cells that substantially lack p53 function, in a patient in need of ~~said~~ the treatment, comprising

administering chemotherapy to said patient,

administering to said patient a dose of a recombinant adenovirus, said recombinant adenovirus comprising a mutation in the E1B-55K gene, said gene encoding a mutated E1B-55K protein comprising a single amino acid substitution mutation, said single amino acid substitution mutation reducing the ability of said mutated E1B-55K ~~mutated~~ protein to bind to the tumor suppressor p53 when compared to the ability of wild-type E1B-55K protein to bind to the tumor suppressor p53 and said recombinant adenovirus has the further property of retaining late viral function, and

allowing sufficient time for said recombinant adenovirus to infect neoplastic cells of said cancer.

12. (Currently Amended) The method of claim 11, further comprising concomitantly administering said recombinant adenovirus with ~~a chemotherapeutic~~the chemotherapy.

13. (Previously Presented) The method of claim 11, wherein said adenovirus is Onyx 051 or Onyx 053.

14. (Currently Amended) A method of treating a cancer, characterized by neoplastic cells that substantially lack p53 function, in a patient in need of ~~said~~ the treatment, comprising

administering chemotherapy to said patient,

administering to said patient a dose of an isolated polynucleotide wherein said polynucleotide comprises a ~~polynucleotide~~ DNA sequence encoding a recombinant adenovirus, said recombinant adenovirus comprising a mutation in the E1B-55K gene, said gene encoding a mutated E1B-55K protein comprising a single amino acid substitution

mutation, said single amino acid substitution mutation reducing the ability of said mutated E1B-55K protein to bind to the tumor suppressor p53 when compared to the ability of wild-type E1B-55K protein to bind to the tumor suppressor p53 and said recombinant adenovirus has the further property of retaining late viral function, and

allowing sufficient time for said adenovirus to infect neoplastic cells of said cancer.

15. (Canceled)

16. (Currently Amended) The method of treating cancer of claim 14, wherein said polynucleotide encodes said E1B-55K protein and said protein comprises a single amino acid substitution mutation at position 240 of said protein.

17. (Currently Amended) The method of treating cancer of claim 14, wherein said polynucleotide encodes said E1B-55K protein and said protein comprises a single amino acid substitution mutation at position 260 of said protein.

18. (Canceled)

19. (Canceled)

20-22. (Canceled)

23. (Canceled)

24. (Previously Presented) The method of treating cancer of claim 11, wherein said treatment is repeated.

25. (Previously Presented) The method of treating cancer of claim 13, wherein said recombinant adenovirus is Onyx 051.

26. (Previously Presented) The method of treating cancer of claim 13, wherein said recombinant adenovirus is Onyx 053.

27. (Currently Amended) The method of treating cancer of claim 11, wherein said mutated E1B-55K protein comprises a single amino acid substitution mutation in amino acid 240 or 260.

28. (Previously Presented) The method of treating cancer of claim 11, wherein replication of said recombinant adenovirus is cold insensitive.

29. (Previously Presented) The method of treating cancer of claim 14, wherein said treatment is repeated.

30. (Previously Presented) The method of treating cancer of claim 14, wherein replication of said recombinant adenovirus is cold insensitive.

31. (Currently Amended) The method of treating cancer of claim 14, further comprising concomitantly administering said polynucleotide with ~~a chemotherapeutic~~the chemotherapy.

32. (Previously Presented) The method of treating cancer of claim 14, wherein said polynucleotide is administered with a liposome.

33. (New) A method of treating a cancer, characterized by a tumor comprising neoplastic cells that substantially lack p53 function, in a patient in need of the treatment, comprising

administering by direct injection into the tumor a dose of a recombinant adenovirus, said recombinant adenovirus comprising a mutation in the E1B-55K gene, said gene encoding a mutated E1B-55K protein comprising a single amino acid substitution mutation, said single amino acid substitution mutation reducing the ability of said mutated E1B-55K protein to bind to the tumor suppressor p53 when compared to the ability of wild-type E1B-55K protein to bind to the tumor suppressor p53 and said recombinant adenovirus has the further property of retaining late viral function, and

allowing sufficient time for said recombinant adenovirus to infect neoplastic cells of said cancer.

34. (New) The method of claim 33, further comprising administering chemotherapy.

35. (New) The method of claim 33, wherein said adenovirus is Onyx 051 or Onyx 053.

36. (New) The method of treating cancer of claim 35, wherein said recombinant adenovirus is Onyx 051.

37. (New) The method of treating cancer of claim 35, wherein said recombinant adenovirus is Onyx 053.

38. (New) The method of treating cancer of claim 33, wherein said mutated E1B-55K protein comprises a single amino acid substitution mutation in amino acid 240 or 260.

39. (New) The method of treating cancer of claim 33, wherein replication of said recombinant adenovirus is cold insensitive.

40. (New) The method of treating cancer of claim 33, wherein said treatment is repeated.

41. (New) A method of treating a cancer, characterized by a tumor comprising neoplastic cells that substantially lack p53 function, in a patient in need of the treatment, comprising

administering by direct injection into the tumor a dose of an isolated polynucleotide wherein said polynucleotide comprises a DNA sequence encoding a recombinant adenovirus, said recombinant adenovirus comprising a mutation in the E1B-55K gene, said gene encoding a mutated E1B-55K protein comprising a single amino acid substitution mutation, said single amino acid substitution mutation reducing the ability of said mutated E1B-55K protein to bind to the tumor suppressor p53 when compared to the ability of wild-type E1B-55K protein to

bind to the tumor suppressor p53 and said recombinant adenovirus has the further property of retaining late viral function, and

allowing sufficient time for said adenovirus to infect neoplastic cells of said cancer.

42. (New) The method of treating cancer of claim 41, wherein said polynucleotide encodes said E1B-55K protein and said protein comprises a single amino acid substitution mutation at position 240 of said protein.

43. (New) The method of treating cancer of claim 41, wherein said polynucleotide encodes said E1B-55K protein and said protein comprises a single amino acid substitution mutation at position 260 of said protein.

44. (New) The method of treating cancer of claim 41, wherein said treatment is repeated.

45. (New) The method of treating cancer of claim 41, wherein replication of said recombinant adenovirus is cold insensitive.

46. (New) The method of treating cancer of claim 41, further comprising administering chemotherapy.

47. (New) The method of treating cancer of claim 41, wherein said polynucleotide is administered with a liposome.